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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/564,749

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EXAMINER

WONG, ALBERT KANG

ART UNIT

PAPER NUMBER

2612

MAIL DATE

DELIVERY MODE

08/19/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/564,749	Applicant(s) GIUBBINI, PAOLO	
	Examiner ALBERT K. WONG	Art Unit 2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 April 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

1. This Office action is in response to the amendment filed April 29, 2008. Claims 1-21 are pending. The amendment has been entered as requested. The prior rejections have been modified to address the amendment to the claims, however, the basis premise of the rejections are essentially the same.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Argyroudis (5,892,758) in view of Holowick (6,710,721).

Regarding claim 1, Argyroudis teaches the claimed method of remote metering of the consumption of utilities (col. 1, lines 18-20) distributed through a public distribution network (col. 1, lines 18-25) where each consumer is associated with at least one remote meter (fig. 3). The plurality of remote meters measures consumption and reports the data to a concentrator associated with the plurality of meters via communication with the concentrator. The concentrator also performs administrative tasks (col. 1, lines 32-36). Each of the remote meters

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has a host controller and a program memory for executing programs stored in the memory (col. 10, lines 41-54). The concentrator performs the task of transmitting program data to at least one of the remote meters and the remote meters performs the operation of receiving the program data and updating at least a portion of the program in the memory. Argyroudis does not explicitly teach that the transmission of program data comprises successively sending data messages that comprise portions of the program data, or information defining a sequence of program instructions. Since the system in Argyroudis uses a conventional packet switched network, it would have been obvious to send the program as a series of packets since the network is unable to accommodate a burst of data that would constitute a program.

Holowick teaches a remote meter in communication with a concentrator. Col. 3, lines 1-5 teaches the reception of data to update the “internal software via downloading through a transceiver.” One of ordinary skill in the art would recognize that software defines a sequence of program instructions.

Regarding claim 2, the sending of commands to an individual meter by or a group of meters by address is conventional. It would have been obvious to send program data via a similar form to achieve the same objective.

Regarding claim 3, it would have been obvious to include a program update message so that the meters would understand the nature of the command and perform the desired function.

Regarding claims 4-5, these messages are considered conventional commands to control the operation of the system and thus, would have been obvious to one of ordinary skill.

Regarding claims 6-16, these steps are considered conventional in computer based systems, and thus, obvious since they would be known to one of ordinary skill in the art and

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would be implemented to perform the desired function. Claim 6 recites a file transfer protocol. Claim 7 recites a request for acknowledgement and the resending of data upon failure. Claim 8 recites repeating a query until it is successful. Claim 9 recites the use of acknowledgement and the inhibition of further queries. Claim 10, recites an acknowledgement message. Claim 11 recites the use of a buffer memory. Claim 12 recites the use of a non-volatile memory. Such memory is used to retain data in the absence of power. Claim 13 recites the step of error checking before and after storage of the received data. Claim 14 recites the use of bootstrap to perform software loading. Claims 15-16 recite the use of flags to indicate status.

Regarding claim 17, Argyroudis teaches in col. 6, lines 4-7 the use of power lines to communicate with meters.

Regarding claim 18, see col. 1, lines 16-25 of Argyroudis.

Regarding claim 19, col. 2 of Holowick describes the use of remote meters and concentrators. The functional steps have been addressed in the prior claims.

Regarding claim 20, the structural limitations have been addressed above with the exception of the communication interface and the microcontroller. The communication interface is inherent since this is required for communication. The microcontroller is well known in the art for processing data in digital system. The inclusion of conventional means for their known function would have been obvious to one of ordinary skill in the art.

Regarding claim 21, this claim merely recites the meter for communicating with the system in the desired manner as recited in claim 1. Since the method has been shown to be obvious, the end point which performs according to the method would also have been obvious.

Remarks

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5. Applicant has presented several arguments pertaining to the patentability of the claims. The Examiner, however, has found the arguments not persuasive.

First, applicant argues that Argyroudis does not teach the transmission of program data defining a sequence of instruction to a remote meter. The Examiner agrees with this assertion since the citation of Holowick is used to teach this concept. Applicant argues that Holowick also fails to teach this claimed limitation since in his opinion the cited passage is "unclear." And that software could simply be data. The Examiner disagrees. Holowick states: "The programming module comprises a transceiver adapted to provide data to a diagnostic and programming device indicative of operating characteristics of the device, including any changes of device performance, battery levels, and further allowing the reception of data such as to update of internal software via downloading through the transceiver when desired." Emphasis added. Thus, the passage refers to gathering data to be sent to the collector, but also allows the reception of data in the form of internal software. Software may be data but it is a special form of data. In fact, in claim 1 applicant recites: "program data including information defining a sequence of program instructions." Information is synonymous with data. To further support his position, the Examiner cites two references from Wikipedia. The first citation was published prior to applicant's effective filing data. Although the second citation was edited after the filing data, it should still be considered prior art since the definition would be that known prior to applicant's invention. Wikipedia defines software as: a generic term for organized collections of computer data and instructions, often broken into two major categories: system software that provides the basic non-task specific functions of the computer, and application software which is used to

accomplish specific tasks. System software is responsible for controlling, integrating, and managing individual hardware components of a computer system”.

This definition would include a sequence of program instructions. The device in Holowick would include a processor that performs the function of a computer and would control individual hardware components for performing task such a data transmission and reception as well as data gathering functions from the meter monitored. Therefore, applicant's argument is not persuasive.

Applicant further argues that the Clark reference does not teach the limitation pertaining to a sequence of program instructions and that this reference is inapplicable since the PCT report merely cited this as an “A” reference. This argument is rendered moot since this reference has been removed from the rejection. The mere fact that a reference is cited on a PCT report indicates that it has some relevance with respect to the invention. It does not preclude its application within a rejection in a limited context. An “A” designation merely indicates that in on Examiner’s judgment this reference does not rise to the level of anticipation or obviousness. Further, such a judgment is not binding on the determination of a different Examiner or even the instant Examiner at a later date.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALBERT K. WONG whose telephone number is (571)272-3057. The examiner can normally be reached on M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian A. Zimmerman can be reached on 571-272-3059. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Albert K Wong/
Primary Examiner, Art Unit 2612

August 12, 2008

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